

MedicaSoft Implementation Project – Project Governance Plan

Vermont Information Technology Leaders (VITL) – May 2020

Introduction

October 2019 marked the start of an exciting journey to establish a new, robust clinical data repository to provide Vermont health care data for reporting and analytic activities, with the objective of supporting the improvement of health care quality and efficiency of the health care system. The initial phase of the project, then referred to as the “Future Data Platform”, was initiated by the Department of Vermont Health Access (DVHA) and executed by VITL to select a vendor platform for the repository, with participation and support of an important group of stakeholders that represented potential users and beneficiaries of the new system. The initial steps consisted of a comprehensive effort to review the technology marketplace to identify a vendor partner that could fulfill the requirements identified for the platform by DVHA, VITL, and the project stakeholders. The plan is for VITL to operate and manage the system as part of the scope of the Vermont Health Information Exchange (VHIE) in its role as contractor to the State of Vermont.

Today, there are two major databases in use within the VHIE. The first is the clinical repository database supporting the Health Catalyst Interoperability (HCI) platform. The HCI platform functions primarily to support clinicians at the point of care by providing electronic results delivery, a provider portal for viewing patient records, Direct Secure Messaging, and interfaces to provider Electronic Health Records (EHRs) which can transmit patient summary documents known as Continuity of Care (CCD) documents. The second database is known as the Health Data Management (HDM) database. The HDM database is used to provide data to organizations (such as OneCare Vermont) for data analysis and for VITL’s use in the management of data quality and metrics.

Outside the VHIE, there have recently been two additional significant databases populated by VHIE data. The first of these is the Vermont Clinical Registry (VCR), which was terminated on 12/31/2019 with the goal of incorporating it with the VHIE. The VCR served as the primary repository to support the State’s Blueprint program activities. The second is the VITL/OCV Datamart, still in operation, used to convey data to One Care Vermont (OCV), Vermont’s Accountable Care Organization (ACO), for use in population health management. The HDM is self-developed and hosted on-premise by VITL. The VCR was a vendor developed system, but no longer supported by the vendor. The HDM and VCR were very similar in their intended purpose.

The overall Future Data Platform project seeks to address the fragmented data structures to date (the HDM and VCR) through selection and implementation of a vendor-supplied Future Data Platform that will allow the described databases to consolidate and allow the potential for consolidation of other data repositories in the future.

Using a vendor-supplied system to replace the HDM will streamline support and allow for rapid capability improvement and future growth of data, eliminating the challenging and complex

development currently required to advance the HDM platform, and remove the maintenance and dependency for the VCR on the legacy software, which as stated is no longer vendor supported.

Furthermore, the project seeks to expand the scope of the current available data. Limitations in today's systems prevent the inclusion of health care data with needs for specific patient consent to share, such as 42 CFR Part 2 (substance use disorder) data, and mental health data. There is also a desire to include additional data such as health care claims, which would expand the power of the platform.

With the decommissioning of the VCR, it became critical to have the new platform up and running by January 2021, to meet the needs of the Blueprint program.

Efforts to Date

The expertise of the stakeholder team for the selection effort was critical in ensuring that requirements and needs for the new platform were fully understood and that the best possible vendor choice was identified. The group that participated was as follows:

Future Data Platform Selection Team	
Organization	Member Name
ADS	Bechir Bensaid
ADS	Richard Terricciano
ADS	Mahesh Thopasridiran
BiState Primary Care Association	Lauri Scharf
DVHA/Blueprint	Tim Tremblay
Green Mountain Care Board	Sarah Lindberg
Green Mountain Care Board	Jessica Medizabal
OneCare Vermont	Tyler Gauthier
OneCare Vermont	Katelyn Muir
Vermont Care Partners	Ken Gingras
Agency of Human Services/Vermont Department of Health	Darin Prail
VITL	Gayle Goodwin
VITL	Frank Harris
VITL	Christopher Shenk
VITL	Carolyn Stone

The Selection Team collaborated to charter the project and document requirements in detail. They reviewed the potential vendor partners available in the marketplace in a comprehensive process and made a unanimous recommendation that MedicaSoft be chosen as the partner to provide the new system. VITL and DVHA leadership met to discuss the recommendation of the Selection Team and it was accepted by DVHA and VITL Leadership on February 27, 2020. VITL conducted contract negotiations and the initiative was approved by the VITL Board on March 24th. VITL executed the contract for the new system with MedicaSoft on April 22, 2020.

Project Implementation

Now it is time to move forward to implement the system. As before, the expertise and guidance of stakeholders will be critical to a successful outcome.

This document describes VITL's proposal for strategy and structure to ensure proper guidance and oversight of the project.

Project Organization and Participants

Proposed organizational structure for the project is illustrated in Figure 1.

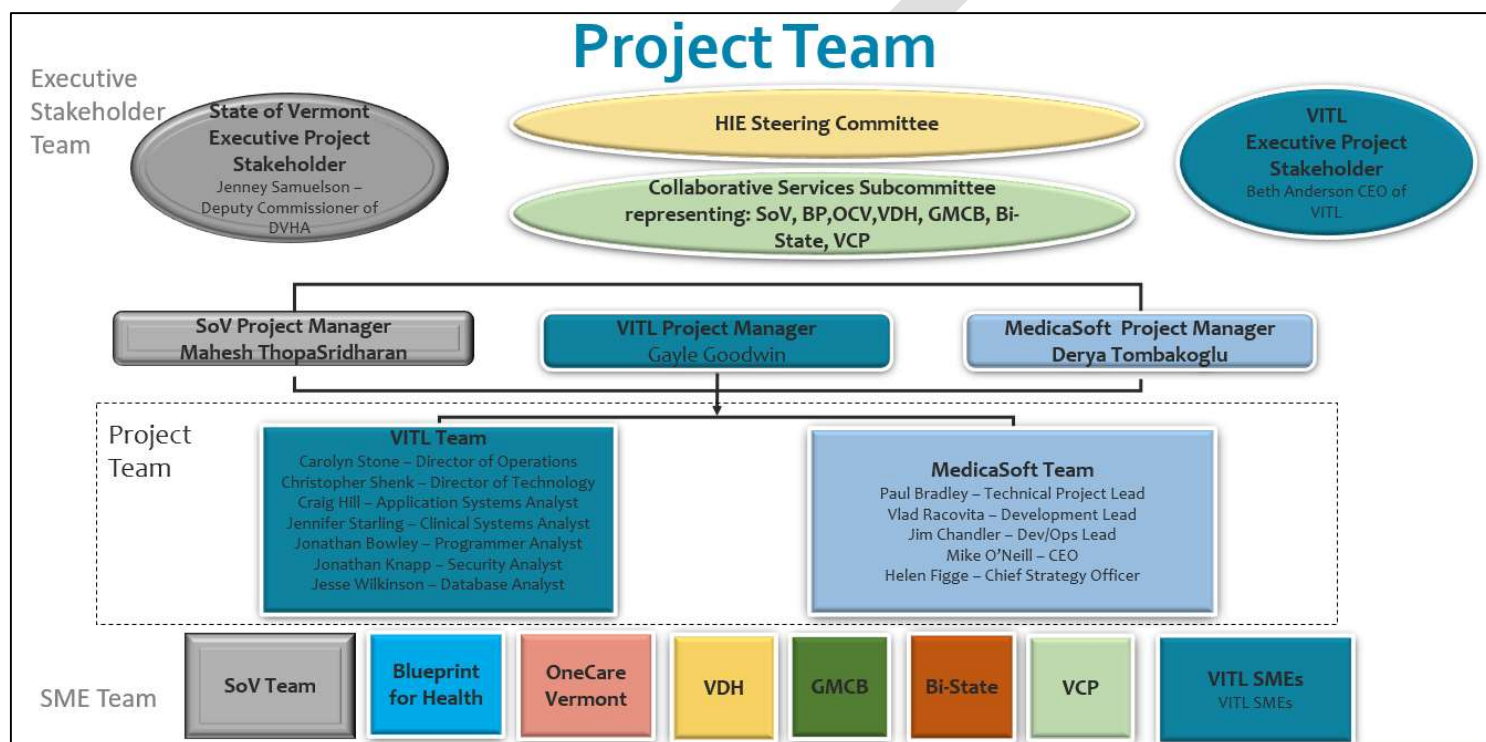


Figure 1: Proposed Project Organization

The groups illustrated on the diagram are as follows:

EXECUTIVE STAKEHOLDERS

Executive Project Stakeholders: The Executive Project Stakeholders will provide executive level oversight, decision making, and troubleshooting for the project team. They are the organizational leaders ultimately accountable for the success of the project. Jenney Samuelson, Deputy Commissioner of DVHA, and Beth Anderson, CEO of VITL, are proposed for these roles.

HIE Steering Committee: Vermont's HIE Steering Committee supports the development, execution, and oversight of Vermont's HIE plan. The MedicaSoft implementation represents a significant investment and strategic effort to advance HIE capability and sustainability, therefore the HIE Steering Committee should provide oversight and guidance to the project.

Collaborative Services Subcommittee: The Collaborative Services Subcommittee is proposed to provide general strategic oversight to the project with comprehensive stakeholder representation to ensure that goals are properly prioritized, and that the implementation will meet stakeholder needs. It is intended to be broadly representative of those stakeholders that are (or may be) impacted by the project, both in the first phase and in future planned enhancing phases. Proposed membership and working methodology for this group are described below. Upon approval of the HIE Steering Committee, this group will be organized and function as a subcommittee of the HIE Steering Committee. Assessment of project progress by the Subcommittee and reporting to the HIE Steering Committee will be expected and encouraged. In addition, to support detailed work on specific project tasks, Subject Matter Experts (SMEs) from many of the same entities will be engaged on an ad-hoc, need-driven basis as described below.

PROJECT MANAGERS

Project Managers: The proposal calls for three Project Managers to manage the project planning and execution. VITL and MedicaSoft will each have a project manager; Gayle Goodwin and Derya Tombakoglu respectively. These two will be fully engaged in the detail of managing and planning the project, helping to ensure timely execution and adequate resourcing from the two organizations. DVHA has assigned Mahesh ThopaSridharan as its Project Manager to provide due diligence oversight of the execution of the project plan and reporting to DVHA leadership as required.

PROJECT TEAM

VITL/MedicaSoft Project Team: Under the terms of its contract with the State of Vermont, VITL is responsible for project implementation, working with MedicaSoft. The Project Team consists of the VITL and MedicaSoft resources that will provide the primary labor for project implementation. In general, involvement of these resources is to be focused on execution of the scope and direction provided by Executive Project Stakeholders, the HIE Steering Committee, and the Collaborative Services Subcommittee. The Project Team will be expected to provide high-level reports on progress and issues to the Executive Project Stakeholders and HIE Steering Committee, and to exercise careful judgement in escalating details, issues, and options to the Collaborative Services Subcommittee for decision-making, feedback, and troubleshooting when appropriate.

SMEs

Subject Matter Experts (SMEs): A number of project objectives will require intensive involvement from specific project stakeholders external to VITL and MedicaSoft in order to be executed successfully. For example, the State's Blueprint for Health is a critical partner in the project, as the new platform is replacing the primary platform (the Vermont Clinical Registry) which has historically provided data to the Blueprint. The same is true for OneCare Vermont, which has relied on VITL's HDM platform, also being replaced by MedicaSoft. Phases of the project which will implement these features will engage the relevant SMEs from these organizations in the detail required for successful implementation. These are but two examples, and as shown in Figure 1 other phases of the project are likely to require similar involvement from additional SMEs. This engagement will be driven by the scope and timing of project tasks as they are identified in project planning and execution. VITL will work with the Collaborative Services Subcommittee to identify the individuals to serve as SMEs for their respective organizations, as needed.

High Level Attributes and Milestones

Charter and Scope Validation

As is typical for projects of this nature, it is critical that a project charter be documented and agreed upon as a first step in management of the project. VITL's usual methodology for project charters is well-established and known to DVHA and is typical of project best practices. The charter will include project background, business objectives, expected outcomes, high level requirements, timing, organizational structure, governance and membership, and project scope (describing both "in scope" and relevant "out of scope" elements).

In regard to project scope, while there has been significant high-level project scope discussion and definition which involved project stakeholders during the vendor selection process, it makes sense that the scope be revisited and validated at this time, since it naturally drives the project tasks and value proposition. The prior discussions have not been significantly revisited since October 2019, and it also is prudent to review them now that the vendor has been chosen. It will be important to recognize, however, that there are already critical time-dependent project objectives and opportunities that have been identified, and it will be essential not to stray too far when determining the scope so as not to threaten these critical objectives – these are discussed below ("Critical Areas of Focus").

To review, during the prior discussions the following timing was agreed upon for high-level objectives:

1. Clinical data which covers the current functionality of the HDM and VCR, by end of 2020.
2. Additional Clinical data to expand the current capability - beginning 2021. This will be used for the HDM, VHIE and VCR/BluePrint:
 - Immunizations
 - Pharmacy
 - Substance use data
 - Mental health data
 - Women's health data
 - Ability to protect sensitive data, including support for consent requirements
3. Claims data - end of 2021
4. Social determinants of health (SDH) data - end of 2021

VITL will ensure that scope validation is carried out with the Collaborative Services Subcommittee, the HIE Steering Committee, and the Executive Project Stakeholders, and engaging the SMEs as necessary to refine the scope.

Critical Areas of Focus

There are a number of critical areas of focus which must be addressed in the first phase of the project. Some of these are driven by established requirements for the platform in a particular timeframe which cannot be changed. Others are significant opportunities which are compelling. Still others are simply unavoidable elements of work which are de facto requirements to make the platform work at all or are needed to ensure a prudent approach. This document offers these elements to provide perspective to the reader and to ensure their consideration – not to dictate the project scope. It is recognized that the scope will be validated by the governance and execution groups (Executive Stakeholders, HIE Steering

Committee, Project Team and Collaborative Services Subcommittee) that have been defined. Critical Areas of Focus to consider include:

- Establishment of the technical infrastructure for the platform (Amazon Web Services (AWS) infrastructure components, MedicaSoft software components).
- Establishment of operational methodologies, processes, and cadence to ensure reliable operation of the new platform.
- Integration of the Rhapsody Interface Engine, Verato Master Patient Index, and Term Atlas terminology service established in the Collaborative Services Phase 1 Project.
- Implementation of required security components and processes to ensure security and management of the privacy of protected health information.
- Implementation of sufficient functionality to meet requirements for the State's Blueprint for Health program. There are critical requirements which must be met by January 2021.
- Implementation of required reports to support operation of the platform, for example data quality reports and reports to monitor interface volumes to identify potential interface issues.
- Strong emphasis on replacement of VITL's HDM platform. This includes replacement of the HDM as the primary source for data to support OneCare Vermont with the new MedicaSoft platform. This should be a strong emphasis to allow VITL to streamline its operations and avoid the need to support and operate both the legacy HDM and the new MedicaSoft platform, and to avoid wasting resources on development of HDM functionality to meet needs since the HDM is headed toward decommissioning in the short term. In addition, it is important to replace the HDM fully at the earliest opportunity to open the door to new opportunities which were previously unavailable, such as enhancement of data quality, expansion of available data, and provision of data to health care organizations to enable data analysis. These capabilities, when coupled with the improved patient matching and data translation capabilities realized in the first phase of the Collaborative Services program, will be a powerful enhancement to the VHIE value proposition.

These Critical Areas of Focus represent substantial effort during the timeline for the first project phase. Again, it will be critical to be extremely careful in defining the elements of the project scope to avoid risk to these essential outcomes.

Working Methodology

The MedicaSoft Implementation Project implements more than just a system. It also represents a strategic change in approach to providing the relevant functionality to the Vermont Health Information Exchange (HDM) and the Blueprint for Health (VCR).

With the HDM and the VCR, there was heavy emphasis on internal development and management of all components of each of the platforms. The HDM was developed by VITL and all aspects of the system, from hardware infrastructure to software and database management and design, were managed by VITL. Similarly, the VCR, while based on a vendor platform, was no longer supported by the original vendor and all aspects of operating the system were provided by the State's subcontractor for this purpose.

With the implementation of the MedicaSoft system, the strategy shifts to a cloud-based, software-as-a-service approach. The vendor's development, operations, and infrastructure capabilities as well as the

Amazon Web Services infrastructure itself can now be leveraged. Similarly, the vendor's expertise and methodology in successful implementation of their platform must be leveraged to realize the full value of this strategic shift, and to minimize risk in the implementation.

MedicaSoft's implementation methodology is based on Agile software development. A full discussion of that methodology is beyond the scope of this document. MedicaSoft uses the Atlassian platform to support their Agile process. Agile methodologies have achieved rapid and positive results in large and complex software development and project implementation. Some key aspects of this approach are:

- The project is broken up into large components of work known as epics.
- Epics are further broken down into smaller tasks known as stories.
- MedicaSoft and VITL plan to use the agile "scrum" methodology. In this methodology, the work is managed in short term mini projects which typically consist of multiple two week long "sprints". Each sprint has a defined goal and definition of success.
- There are several meetings in sprint management known as "ceremonies". These include sprint planning, where the work scope for the sprint is defined, daily rapid "stand-ups" for the development team to quickly update status and plans for daily work, sprint reviews, where the results of the sprint are reviewed (often demonstrated) upon completion of the sprint, and sprint retrospectives, which review sprint process and ways of working after a sprint for potential changes based on lessons learned.

The methodology has proven to reduce project risk through rapid completion and validation of manageable sub-components as a way of breaking down large complex implementations.

VITL proposes to involve the Collaborative Services Subcommittee members and SMEs in the sprint process as follows:

- VITL and MedicaSoft will engage SMEs as needed in project sprints which require detailed involvement of the relevant SMEs.
- As sprints are completed, VITL will utilize the Collaborative Services Subcommittee and SMEs as appropriate to validate successful sprint outcomes through sprint reviews.
- Each sprint will have a review that will present the work completed for approval and feedback. All stakeholders will be welcome to attend any of the sprint reviews.
- A summary of what will be presented in a sprint review will be shared in advance so stakeholders can select reviews that they wish to attend.
- Specific stakeholders (SMEs and/or Collaborative Services Subcommittee members) will also be explicitly asked to attend the reviews when the subject matter makes their feedback on results of a sprint essential.

This approach is key to realizing the benefits of the Agile approach, since it allows for early feedback as the project progresses to be sure the final product is on track to meet stakeholder needs.

Discovery and Draft Planning

VITL proposes that the Collaborative Services Subcommittee be engaged at a strategic and tactical level, rather than requiring the stakeholders be engaged in all details of the project. Instead, as previously described, it is proposed that the Project Team will develop the details of proposed project plans and requirements and validate these with the Collaborative Services Subcommittee, and as appropriate, with the Executive Project Stakeholders and HIE Steering Committee.

It should be recognized that both the VITL and MedicaSoft members of the Project Team have much to learn. VITL needs to begin to learn details of MedicaSoft's system and implementation methodology, and MedicaSoft needs to learn about the VHIE ecosystem, objectives, and needs. Toward these goals, VITL has begun a series of discovery and planning sessions with MedicaSoft. Upon approval of this plan, VITL will recruit Collaborative Services Subcommittee membership and then work within the described governance structure (Collaborative Services Subcommittee, HIE Steering Committee, and Executive Project Sponsors) to charter the project, including validation of project scope. VITL will then draft a project plan and validate the plan through the project governance groups as appropriate.

Potential Opportunities

Often large system implementations such as the MedicaSoft Project make the mistake of viewing the objective as implementing existing processes and ways of working using a new system. This misses an important opportunity to use the new system capabilities to enable new and better ways of working.

While this document has described some "Critical Areas of Focus", it will be important during project scoping and throughout project execution to be prudently entrepreneurial in identifying opportunities to do things in different, better ways, as enabled by new capabilities. As examples, stakeholders may be able to take advantage of new data elements or ways of accessing data. All of the groups involved in the project, including the Stakeholder Working Group and the Project team, should be alert to identify these opportunities, but at the same time be careful to avoid introducing excessive risk to the implementation of the Critical Areas of Focus according to the required timeline.

Proposed Stakeholder Subcommittee Membership

For the HIE Steering Committee's consideration, the following membership is proposed for the Collaborative Services Subcommittee. It is extremely similar to the membership of the Selection Team utilized in selecting the system vendor. The members of that group were extremely engaged and collaborated exceptionally well. They provided critical insights throughout the system selection, and if available, are likely to do so again during the implementation.

Proposed Collaborative Services Subcommittee	
Organization	Member Name
ADS/HIE Program Manager	Bechir Bensaid
ADS	Richard Terricciano
Agency of Human Services	Darin Prail
BiState Primary Care Association	Lauri Scharf
BlueCross BlueShield	TBD by BCBS
DVHA/Blueprint	Tim Tremblay
DVHA Project Manager	TBD by DVHA
Green Mountain Care Board	Sarah Lindberg
Green Mountain Care Board	Jessica Medizabal
OneCare Vermont	Tyler Gauthier
Vermont Care Partners	Ken Gingras
Vermont Department of Health	Karen Clark
VITL	Gayle Goodwin
VITL	Carolyn Stone

While some of the above group members will likely also serve as SMEs to the project, the individuals serving as SMEs may differ or include additional experts. As stated previously, the Collaborative Services Subcommittee will be utilized by VITL to identify appropriate SMEs as needed to complete project tasks. Figure 1 illustrates likely organizations from which SMEs will be sought.

VITL will request validation of the membership of the Collaborative Services Subcommittee from DVHA, from the Subcommittee itself as it forms, and from the HIE Steering Committee when this proposal is reviewed with the Steering Committee in a progress report from VITL.

The above proposed group represents a good cross-section of stakeholders that will be impacted by the initial scope, but the HIE Steering Committee should consider involving clinicians and operational staff in the Subcommittee who work at the point of care. This will become particularly important as the new platform advances and there are opportunities to provide added value to clinicians as they care for patients. It is essential to get these perspectives when determining priorities and strategies to provide optimal support for clinical needs.

Tasks and Time Requirements

The following lists the anticipated project tasks for the Collaborative Services Subcommittee and the SMEs, and the anticipated time requirements:

Collaborative Services Subcommittee Requirements

Project Step	Tasks	Hours	Timeline	Assumptions
Planning Stage	Requirements			
Project Kickoff	Group formation. Familiarize with Stakeholder Working Group role. Discuss next steps	2	Late June	
Project charter and scope validation	Review, discuss, and refine project charter. Discuss project scope and decide on issues.	4	Late June	
Requirements document review	Review detailed requirements document as drafted by VITL and MedicaSoft, including project plan. Refine as necessary	6	Late June	
Implementation Stage				
Project check-ins	Periodic check-ins on project progress. Meetings to discuss ad-hoc issues.	6	Late June through Dec	Assume several general check-ins.
Discuss ad-hoc issues	Meetings to discuss ad-hoc issues issues that may require advice/decision making from the Subcommittee	6	Late June through Dec	Variable - allowance for work sessions on specific design issues (e.g., consent, terminology services, etc.)
Total Hours		24		

Members of the Subcommittee may also optionally attend sprint reviews, where results of sprint work will be presented and/or demonstrated.

SME Requirements

Project Step	Task	OCV	Blueprint	VCP/GMCB/Bi-State
Planning Stage	Includes Discovery Working Sessions to gather Detailed Requirements			
Project Kickoff	Group formation. Familiarize with Stakeholder Working Group role. Discuss next steps	2	2	2
Data requirement gathering	Data requirements gathering	15	15	NA
Requirements document review	Review detailed requirements document as drafted by VITL and MedicaSoft, including project plan. Refine as necessary	6	6	NA
Implementation Stage				
MedicaSoft Implementation work	Includes asking questions, QA work and sprint reviews and demonstrations if applicable	20	20	8
Data Quality work	Resolving data quality issues for standardization of code sets, normalization of values, deduplication at the patient level, granularity of data, trackability back to the message	TBD	TBD	NA
OCV/Blueprint work to connect and configure MedicaSoft data into their databases	Includes making MedicaSoft data extracts populate correctly into sites databases. Depending on the final requirements this could vary. VITL will provide estimates when more information is available	TBD	TBD	NA
Training	Training at 2-4 hours per stakeholder. Based on 4 hours for 5 resources	20	20	20
Total Hours		63	63	30

Communication Plan

The following communication plan is proposed:

Communication Type	Objective of Communication	Medium	Frequency	Audience	Deliverable
Kick Off Meeting	Review project scope, team, roles and communication plans	• Conference call meeting	Once	• Entire project team including Collaborative Services Subcommittee and SMEs	• Kick off Deck • Minutes
Project Team Meetings	Working meeting to keep project on track	• Conference call meeting	Weekly	• Project Team and Project Managers	• Work sessions • Minutes
Ad-hoc emails	Provide updates when requested	• Email	As needed	• Entire project team including Subcommittee and SMEs	• email
Working Group Meetings	Small break-out groups for detailed discussion	• Conference call meeting	As needed	• Break-out groups including SMEs	• Work sessions • Minutes
Collaborative Services Subcommittee Meetings/ Demos	Demonstrate work products to date for review and feedback	• Conference call meeting	Periodically Monthly	• Entire project team including Subcommittee and SMEs	• Presentations of work from last presentation
HIE Steering Committee Meeting	Provide updates for feedback	• Conference call meeting	Every 2 months	• HIE Steering Committee	• Slide(s) presented by VITL
Status Reports	Provide updates to DVHA and project stakeholders	• Email	Every 2 weeks	• Entire project team including all stakeholders and SMEs, and DVHA	• email

The Collaborative Services Subcommittee will also need to plan on making a report to the HIE Steering Committee in late summer/early fall for inclusion on the update to the HIE Strategic Plan, which will be finalized in October and presented to the Green Mountain Care Board on November 1, 2020.

Next Steps

The following steps are proposed to begin immediately upon approval of this plan:

- VITL to continue discovery sessions with MedicaSoft, to begin work on drafting project charter (including scope) and project plan.
- VITL to recruit members of the Collaborative Services Subcommittee.
- VITL to conduct project kickoff with the Collaborative Services Subcommittee.
- Collaborative Services Subcommittee to validate draft project charter, scope, and project plan. Once validated by the Subcommittee, these items will be reviewed and validated by the Executive Project Stakeholders and the HIE Steering Committee.
- VITL to work with MedicaSoft to develop a Project Requirements Document to include the detailed final project plan and specifications for implementation and documentation of all system components, features, and functions.
- Collaborative Services Subcommittee to validate the Project Requirements Document.